

Spring-Assisted Drywall Finishing Tools

The Problem

If you use typical flat and corner "mudboxes" for drywall finishing, you need to use a lot of strength to push the compound out of the box. The forceful, repetitive pushing motions combined with reaching overhead can cause fatigue. Eventually this work can lead to serious wrist, arm, shoulder, and back injuries.

With a flat box, you often have to push hard while bending your wrist and back. When you bend like this while pushing forcefully, you increase your chance of developing a muscle or joint injury. Your risk is higher when you do the same job over and over.

Finishers say that corner boxes require them to push even harder than flat boxes, because you have to squeeze the compound into a tighter space.



One Solution

Use a **spring-assisted finishing tool**. This does most of the pushing for you. Spring-assisted flat boxes and corner tools are available that cut down significantly on the strain caused by pushing.

With spring-assisted flat boxes, the springs provide up to 75% of the force needed to push the compound onto the wall. Spring-assisted corner tools provide 100% of the force needed to finish corners.

Solution: Spring-assisted mudbox



How It Works

Spring-assisted flat boxes look and work just like regular boxes. The box wheels activate the power assist feature. Springs on the outside of the box pull on levers. The levers then push on a pressure plate, and the compound squirts out when the wheels touch the wall. The boxes come in several different widths and with different handle lengths.

Spring-assisted corner finishers have hydraulically damped springs. When you turn a handle, the spring pushes the compound through a normal corner-finishing head. All you need to do is guide the tool down the corner.

You use a regular pump to fill both types of spring-assisted tools with compound.

Benefits for the Worker and Employer

A spring-assisted mudbox should reduce a worker's chance of developing a muscle or joint injury. More than 80% of the workers involved in one study liked using the new tools much better than the older ones. After using both new tools, all workers in the study said they were not as tired as when using the regular tools. Most said they had less pain.

The same study suggested that there were gains in productivity. Spring-assisted flat boxes gave the same results and were just as fast as regular boxes. However, they led to less worker fatigue and pain, and workers said they got more done because they were less tired. They also were able to use the new boxes for a longer time without becoming fatigued. In addition, most workers said that the new spring-assisted corner tool was faster and easier to use, compared to the older corner boxes.

Approximate Cost

You can rent or purchase these tools. Rentals cost about the same as for regular boxes. One manufacturer sells a set of three spring-assisted flat boxes for about \$1,300 and a spring-assisted corner finisher for about \$1,400.

For More Information

- Products related to this solution are described at www.cpwr.com/simple.html. Products also may be found on the internet using the following search terms: "drywall tool" + "spring assisted."
- Local contractor tool and equipment suppliers or rental companies may be another source of information on products.
- For general information on this solution, check www.cpwrconstructionsolutions.org and www.elcosh.org.